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### (54) Covalent attachment of specific binding members to a solid phase.

(57) The present invention provides novel methods for the covalent attachment of a specific binding member to a solid phase through the reaction of a thiolated solid phase and a specific binding member that is complexed to a heterobifunctional coupling agent. The resulting immobilized specific binding

member can be used in diagnostic binding assays. The invention enables the production of immobilized specific binding members which have increased sensitivity, specificity and stability, while requiring less specific binding member be used.

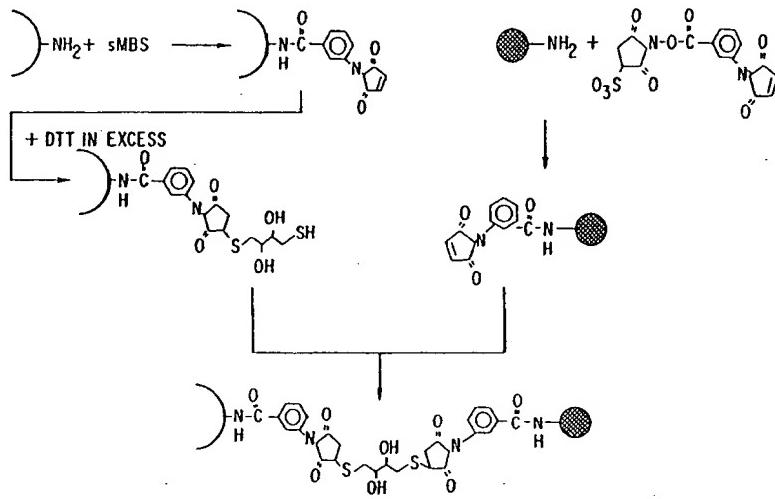


FIG. 7



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## EUROPEAN SEARCH REPORT

Application Number

EP 90 10 8317

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	US-A-4529712 (Y.-H. JOU ET AL.) * the whole document * ---	1-17	G01N33/547 //C12N11/06 //C07K17/06 //G01N33/569
X	US-A-4176006 (R.A. CORMIER ET AL.) * the whole document * ---	7, 8	
X	EP-A-227351 (SHIONOGI & CO. LTD.) * the whole document * --	1, 3, 5, 6	
X	DE-A-2917001 (TOYO JOZO K.K.) * the whole document * --	5, 6	
X	PATENT ABSTRACTS OF JAPAN vol. 5, no. 8 (C-39)(680) 20 January 1981, & JP-A-55 136261 (TOYO JOZO K.K.) 23 October 1980. * the whole document *	1-8	
A	Derwent Publications Ltd., London, GB. DATABASE WPIL, Accession no. 87-206289, week 8729. & WO-A-8704171 (TEIJIN K.K.) 16-07-1987 --	9, 10	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
A	EP-A-306943 (NEORX CORPORATION) * page 5, line 55 - page 6, line 42 * * page 7, line 45 - page 10, line 35 * --	1-4, 7, 8, 11 13-15	
D, P, X	EP-A-314127 (ABBOTT LABORATORIES) * the whole document *	5-19	G01N C12N C07K
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
BERLIN	18 NOVEMBER 1991	DE KOK A.J.	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone	T : theory or principle underlying the invention		
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